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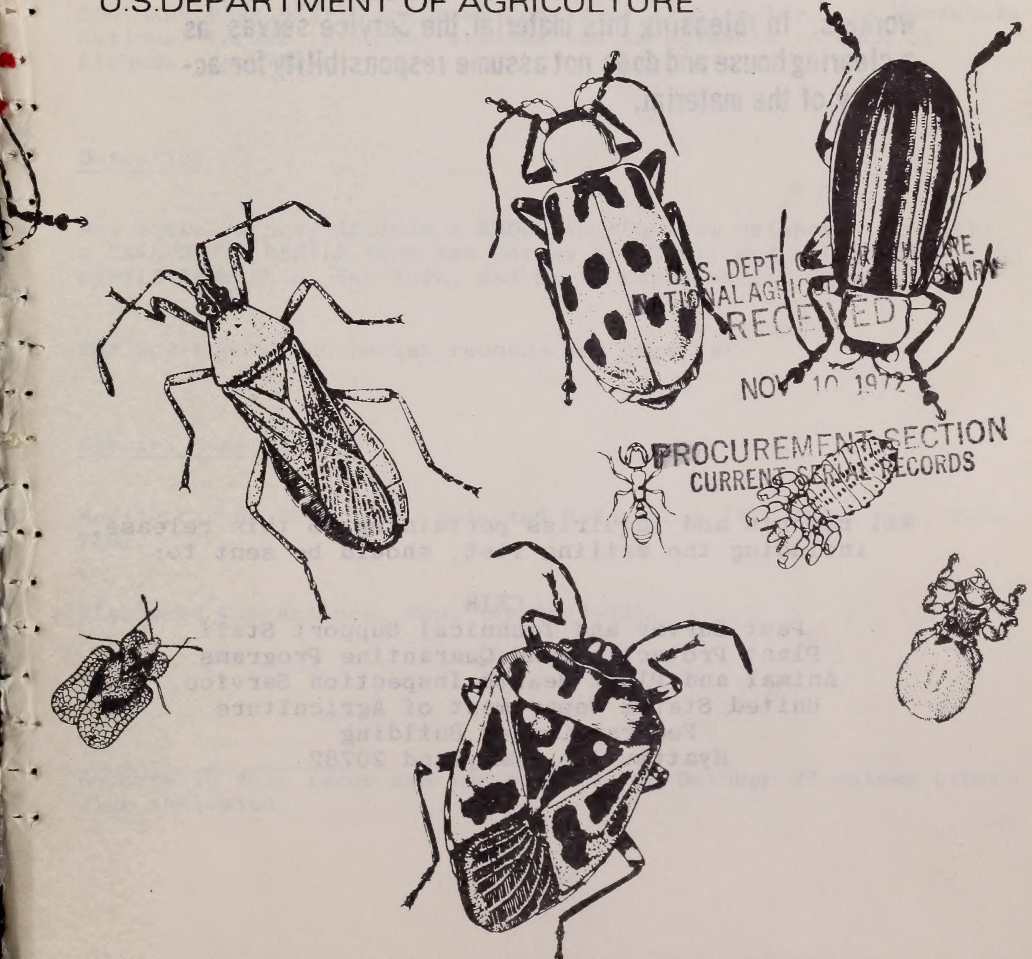
VOL. 22 No. 44 November 3, 1972

Cooperative Economic Insect Report

Issued by
PLANT PROTECTION AND QUARANTINE PROGRAMS
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
U.S.DEPARTMENT OF AGRICULTURE



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The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Service serves as a clearing house and does not assume responsibility for accuracy of the material.

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CEIR
Pest Survey and Technical Support Staff
Plant Protection and Quarantine Programs
Animal and Plant Health Inspection Service
United States Department of Agriculture
Federal Center Building
Hyattsville, Maryland 20782

Volume 22 November 3, 1972 Number 44

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

FALL ARMYWORM damaged wheat in Rolling Plains and BROWN WHEAT MITE heavy on 100,000 acres of wheat in central area of Texas. (p. 737).

PECAN WEEVIL and HICKORY SHUCKWORM economic on pecans in north-central Texas. (p. 738).

SOUTHERN PINE BEETLE outbreak continued at high level on Nantahala National Forest in North Carolina and is epidemic in much of Alabama. (p. 739).

Detection

New State records include a REDUVIID BUG from Oklahoma (p. 741), a CERAMBYCID BEETLE from New Jersey (p. 739), and a DERMESTID BEETLE from Ohio, New York, and North Carolina (p. 740).

For new county and parish records see page 741.

Special Reports

Mediterranean Fruit Fly. Selected References 1970-1971. (pp. 743-746).

Witchweed Quarantines. Map. (Centerfold).

Reports in this issue are for week ending October 27 unless otherwise indicated.

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Witchweed. Quarantines. Map. (Centerfold).

WEATHER OF THE WEEK ENDING OCTOBER 30

Reprinted from Weekly Weather and Crop Bulletin supplied by Environmental Data Service, NOAA.

PRECIPITATION: A vigorous storm, centered over the lower Great Lakes early in the week, spread cloudy skies, winds, and rain over much of the eastern half of the Nation. Snow was mixed with rain from southeastern Minnesota to Upper Michigan. By late Tuesday, a cold front associated with the storm had pushed off the Atlantic coast but dismal, cloudy weather persisted east of the middle and lower Mississippi River. Precipitation was widespread but mostly light. Some drizzle and fog occurred in the northern Appalachians. By midweek, two Highs controlled the weather. An eastern High extended from northern New England to the southern Great Plains. A western High reached from Idaho to southern California. Fair weather prevailed over most of the Nation. However, light rain or drizzle continued in the Pacific Northwest, southern Rocky Mountains, southern Texas, and Florida. Combinations of rain and snow occurred from Michigan and northern New England. As the weekend approached, snow fell in western Montana where Kalispell received 2 inches Thursday. A storm in the Pacific Northwest intensified, moved inland, and spread rain along the Washington and Oregon coast and snow in nearby hills and mountains. The weekend also brought dismal, rainy weather over the eastern third of the Nation from the Great Lakes to the Gulf of Mexico. Rain spread to New York and New England. Heaviest rains fell in northern Louisiana where some totals exceeded 6 inches. No rain or only widely scattered showers fell in California and nearby parts of neighboring States.

TEMPERATURE: A storm centered over the lower Great Lakes early in the week brought cold Canadian air to the northern Great Plains. By Tuesday, strong northwesterly winds aloft were cooling much of the Nation from the Rocky Mountains to the Appalachians. Subfreezing weather occurred as far south as Kansas and northern Oklahoma. Afternoon temperatures ranged from the 40's over the northern Great Plains to the 50's, 60's, and 70's in Texas. By early Tuesday afternoon, a cold front associated with the storm had moved off the Atlantic coast and sunny, pleasant weather returned to mid-America. The northern Great Plains warmed to the 50's and 60's Thursday afternoon. A High over the East in midweek brought chilly Canadian

Weather of the week continued on page 742.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

ASTER LEAFHOPPER (Macrosteles fascifrons) - OKLAHOMA - Leafhoppers, mostly this species, reported in small grains in several areas. Heavy in Comanche, moderate in Pittsburg, and light in Pawnee Counties. (Okla. Coop. Sur.).

GREENBUG (Schizaphis graminum) - WASHINGTON - Populations approaching damaging levels in several wheatfields at Prosser, Benton County. (Klostermeyer). SOUTH DAKOTA - Continued to damage winter wheat. Latest area requiring treatment in eastern Pennington County, north of Wall, and in western Meade County, between Hereford and Sturgis. (Jones). ARKANSAS - Survey negative in northwest area wheat. (Boyer).

SPOTTED ALFALFA APHID (Therioaphis maculata) - ARKANSAS - Continued at low level, 50-100 per 100 sweeps, in alfalfa in northwest area. Hymenopterous parasites increased, will aid in holding pest at low levels. (Boyer).

CORN, SORGHUM, SUGARCANE

FALL ARMYWORM (Spodoptera frugiperda) - FLORIDA - Widespread and heavy on sweet corn in Everglades area of Collier County. Severely damaged or destroyed 97 percent of young sweet corn buds in unsprayed experiment field plots at Belle Glade, Palm Beach County. (Fla. Coop. Sur., Oct. 18).

SOUTHWESTERN CORN BORER (Diatraea grandiosella) - MISSOURI - Fall survey in southeast area showed average infestation of 25.05 percent with average of 7.05 percent of stalks girdled. (Munson). ARIZONA - Heavy in sorghum field northwest of Phoenix, Maricopa County. (Ariz. Coop. Sur.).

CORN ROOTWORMS (Diabrotica spp.) - ILLINOIS - D. virgifera (western corn rootworm) collected on field corn as follows: Near Rushville, Schuyler County, August 15; in Piatt County, August 11; in Douglas County, August 11; in Moultrie County August 11; near Fithian in Vermilion County, August 21, all by J. Krebs; near Athensville, Greene County, and near Modesto, Macoupin County, August 24 by H.B. Petty; 2 miles north of junction of State Highways 100 and 36 August 30 by D. Kuhlman. These are all new county records. All determinations by M.W. Anderson. (Ill. Ins. Rpt.). NEBRASKA - D. virgifera and D. longicornis (northern corn rootworm) populations increased in 1972. Survey indicated percent cornstalks lodged by district as follows: Northeast 7.4, east 7, southeast 3.5, central zero, south zero. (Keith).

SMALL GRAINS

FALL ARMYWORM (Spodoptera frugiperda) - TEXAS - Heavy and damaged wheat in Knox and Foard Counties in Rolling Plains. (Boring).

BROWN WHEAT MITE (Petrobia latens) - TEXAS - About 100,000 acres of oats heavily infested in Falls County. Insecticide applied with limited results. (Boring).

TURF, PASTURES, RANGELAND

AN ALYDID BUG (Esperanza texana) - LOUISIANA - Heavy in several fields of Coastal Bermuda grass in Lincoln Parish; suspected of killing grass. Determined by H.M. Harris. This is a new parish record. (Cancienne).

FORAGE LEGUMES

A NOCTUID MOTH (Tathorhynchus angustiorata) - TEXAS - This looper heavy and damaged mature guar beans in Wilbarger and Hardeman Counties. (Rogers).

GREEN CLOVERWORM (Plathypena scabra) - OKLAHOMA - Moderate to heavy in alfalfa in west-central counties. (Okla. Coop. Sur.).

THREECORNERED ALFALFA HOPPER (Spissistilus festinus) - ARIZONA - Counts per 100 sweeps in alfalfa averaged 130 at Yuma Valley and 130 at Gila Valley, Yuma County; and 134 at Phoenix, Maricopa County. (Ariz. Coop. Sur.).

TARNISHED PLANT BUG (Lygus lineolaris) - OKLAHOMA - Very heavy in alfalfa in Washita, Beckham, Caddo, Roger Mills, and Custer Counties. (Okla. Coop. Sur.).

FIELD CRICKETS (Gryllus spp.) - ALABAMA - These pests and unspecified grasshoppers destroyed seedling crimson clover, white clover, and other re-seedings of winter legumes in all grass sod pastures and fields checked in eastern area. (Barwood et al.).

COTTON

BOLLWORM (Heliothis zea) - NEW MEXICO - Damaged bolls ranged 0-8 percent in fields in northern Eddy and southern Chaves County. (N.M. Coop. Rpt.).

COTTON LEAFPERFORATOR (Bucculatrix thurberiella) - TEXAS - Increased in Brazos River Bottom of Robertson, Brazos, and Burleson Counties. (Cole).

DECIDUOUS FRUITS AND NUTS

PECAN WEEVIL (Curculio caryae) - TEXAS - Heavy populations caused economic damage in Hood, Eastland, Stephens, Erath, Hamilton, and Comanche Counties. Populations variable, heavier in native pecan trees along creeks and rivers. (Hoelscher). OKLAHOMA - Infested 30-50 percent of nuts in small pcan planting in Payne County. (Okla. Coop. Sur.).

HICKORY SHUCKWORM (Laspeyresia caryana) - TEXAS - Heavy populations caused economic damage in Hood, McLennan, Bosque, Erath, Comanche, Hamilton, and Stephens Counties. Infestations ranged 1-5 larvae per pecan in 52-65 percent of nuts in Erath County and 1-6 larvae per pecan in 80 percent in Stephens County. (Hoelscher).

ORNAMENTALS

A CERAMBYCID BEETLE (Leiopus variegatus) - NEW JERSEY - All stages very heavy under bark of large mimosa tree on property in Haddonfield, Camden County, in June 1972. Mimosa so badly weakened by several years of frequent defoliation by Homadaula anisocentra (mimosa webworm) that tree was cut down. L. variegatus found when bark stripped from tree. Collected by M.D. Leonard and D.L. Winters. Determined by T.J. Spilman. This is a new State record. Larvae are known to occur in many varieties of hardwood. It is not known if this cerambycid has been found in mimosa previously. (Leonard).

GREEN PEACH APHID (Myzus persicae) - KENTUCKY - Severely damaged 200 square feet of chrysanthamums in Fayette County greenhouse. Estimated 50 percent of plants rendered unsalable. All plants exhibited some stunting and leaf damage. (Barnett).

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - Outbreak continued at high level on Tusquittee District, Nantahala National Forest (see CEIR 22(43):724). About 116 infested trees occurred per 1,000 acres of host type. Approximately 1.1 million board feet of timber infested in protection boundary at time of ground survey. (Hunt). ALABAMA - Considered epidemic on pine in 40 of 67 counties in State as of September 25. About 44 percent of damaged timber salvaged. Cooperation of landowners involved and forestry interests very good in connection with control program. (Ala. Forest Comm.).

PINE NEEDLE SHEATHMINER (Zelleria haimbachi) - CALIFORNIA - Scattered infestations damaged ponderosa pines on Klamath National Forest in Humbug drainage area. Some of better plantations affected. Active in Shasta-Trinity National Forest. Infestations to be checked in spring 1973 after new growth appears. (McMurtrey, USFS).

AN OLETHREUTID MOTH (Rhyacionia bushnelli) - CALIFORNIA - Larvae averaged 2 per stem on Monterey pine nursery stock in La Mesa, San Diego County. This new pest slowly spreading north in county. To date has not been reported in native pine stands. (Cal. Coop. Rpt.).

BLACK PINELEAF SCALE (Nuculaspis californica) - CALIFORNIA - Heavy, 2-100 per needle, on ponderosa pine from Shasta Lake to Butte County. (Cal. Coop. Rpt.).

VARIABLE OAKLEAF CATERPILLAR (Heterocampa manteo) - OKLAHOMA - Defoliation moderate to heavy on oaks in Mannford area, Creek County, and in scattered areas in western Tulsa County. Most larvae full grown and left trees. (Okla. Coop. Sur.).

A TORTRICID MOTH (Archips semiferanus) - PENNSYLVANIA - Outbreak of past 6 years declining. Defoliation, over 1 million acres previous 2 years, decreased to 610,000 acres in 1972. Timber loss heaviest in State for many decades. Entire forests killed over large areas of Clearfield, Centre, Clinton, and Lycoming Counties. (Kim, Oct. 10).

A GEOMETRID MOTH (Lambdina athasaria athasaria) - PENNSYLVANIA - About 200-300 forest acres along Clarion County streams heavily defoliated, resulting in much mortality. Large numbers of pupae collected under hemlock throughout McConnels Mills State Park in Lawrence County, with many trees dead in area. (Kim, Oct. 10).

MAN AND ANIMALS

SCREWWORM (Cochliomyia hominivorax) - Total of 4,032 confirmed cases reported from continental U.S. during period October 15-21 as follows: Texas 3,625; New Mexico 87; Arizona 213; California 1; Oklahoma 104; Kansas 2. This total was an increase of 307 above the total (3,725) reported previous period. Total of 862 cases reported in Mexico this period. Number of sterile flies released in U.S. October 15-21 totaled 150,438,000 as follows: Texas 126,208,000; New Mexico 5,550,000; Arizona 12,380,000; California 900,000; Florida 4,200,000; Alabama 200,000; Georgia 1,000,000. Total of 41,694,000 sterile flies released in Mexico. (Anim. Health).

FACE FLY (Musca autumnalis) - UTAH - Annoyed horses and cattle in farm areas of Cache and Box Elder Counties during warmer periods of day. (Knowlton).

HORN FLY (Haematobia irritans) - OKLAHOMA - Averaged 500 per head on cattle in Payne County; moderate in Garfield, Pittsburg, and Okmulgee Counties. (Okla. Coop. Sur.).

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Averaged 1 per head in herd of young cows and 0.5 per head in herd of older cows in Payne County. Two adults seen around cattle herd in Osage County. (Okla. Coop. Sur.).

SHORTNOSED CATTLE LOUSE (Haematopinus eurysternus) - OKLAHOMA - Three found on 15 cows in Payne County; first of season. (Okla. Coop. Sur.).

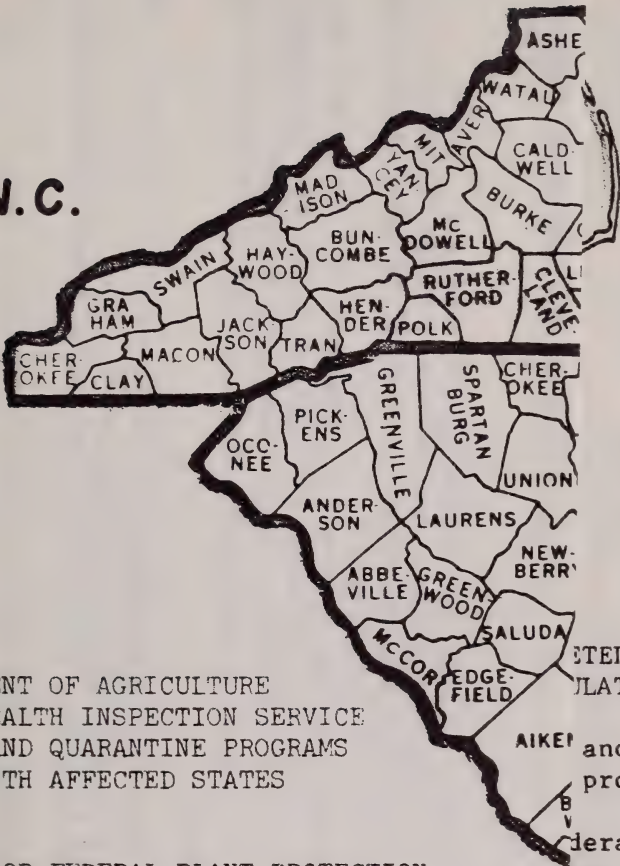
HOG LOUSE (Haematopinus suis) - OKLAHOMA - Ranged 40-50 per head on hogs checked in several areas of Payne County. (Okla. Coop. Sur.).

BROWN DOG TICK (Rhipicephalus sanguineus) - MARYLAND - Annoyance levels and populations in homes increased in Prince Georges, Montgomery, Anne Arundel, and Baltimore Counties. (U. Md., Ent. Dept.).

HOUSEHOLDS AND STRUCTURES

A DERMESTID BEETLE (Anthrenus coloratus) - OHIO - Collected in house in Cincinnati, Hamilton County, March 30, 1970. NEW YORK - Collected in Frankfort, Herkimer County, September 26, 1963, by Asin. NORTH CAROLINA - Collected in apartment in Raleigh, Wake County, March 23, 1971, by O.L. Stephan. Determined by J.M. Kingsolver. These are new State records. See CEIR 19(5):61-62 for background and first report in U.S. (PP).

WITCH\



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OOPERATING WITH AFFECTED STATES

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June 1, 1972

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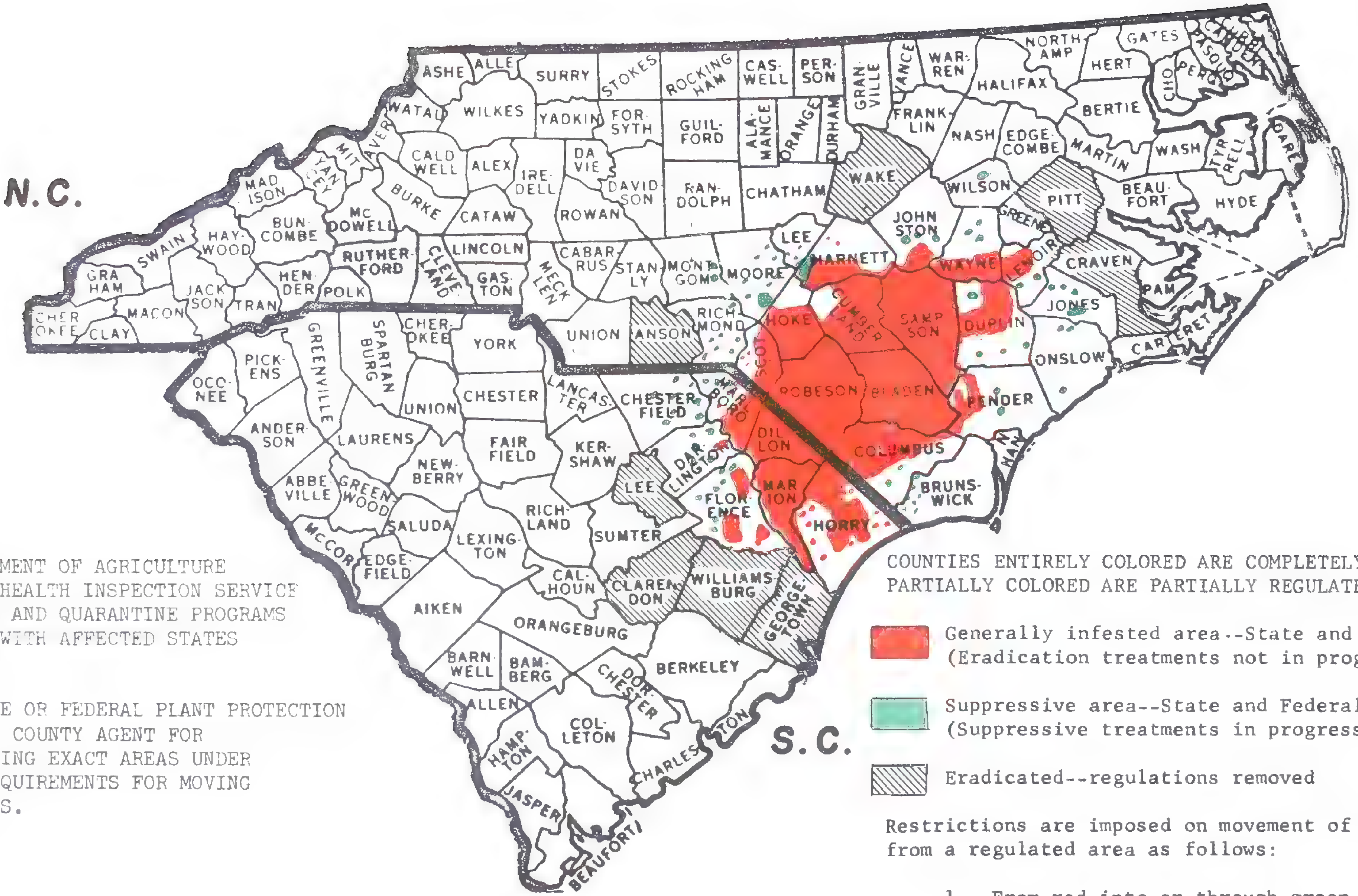
WITCHWEED QUARANTINES



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TED ARTICLES.

COUNTIES ENTIRELY COLORED ARE COMPLETELY REGULATED;
PARTIALLY COLORED ARE PARTIALLY REGULATED.

🟥 Generally infested area--State and Federal regu
(Eradication treatments not in progress or plan

🟩 Suppressive area--State and Federal regulations
(Suppressive treatments in progress or planned)

▨ Eradicated--regulations removed

Restrictions are imposed on movement of regulated ar
from a regulated area as follows:

1. From red into or through green or white.
2. From green into or through white.
3. Green into green.
4. Within green.*

*If required by an authorized inspector.

June 1, 1972

SEE REVERSE SIDE FOR LIST OF REGULATED ARTICLES

THE FOLLOWING REGULATED ARTICLES REQUIRE A CERTIFICATE OR PERMIT YEAR-ROUND EXCEPT AS INDICATED:

1. Soil, compost, decomposed manure, humus, muck, and peat, separately or with other things; sand; and gravel.
   Soil samples shipped to approved laboratories do not require attachment of certificate or permit.*
2. Plants with roots.
3. Grass sod.
4. Plant crowns and roots for propagation.
5. True bulbs, corms, rhizomes, and tubers of ornamental plants.
6. Root crops, except those from which all soil has been removed.
   Root crops, such as turnips, carrots, and sweet potatoes, are exempt if moving to a designated processing plant.*
7. Peanuts in shells and peanut shells, except boiled or roasted peanuts.
8. Small grains and soybeans.
   Small grains are exempt** if harvested in bulk or into new or treated containers, and if the grains and containers for the grains have not come in contact with the soil, or if they have been cleaned at a designated facility.*

   Soybeans, other than for seed purposes, are exempt** if harvested in bulk or into new or treated containers, and if the beans and containers for the beans did not come in contact with the soil, and if such beans are moving forthwith to a designated oil mill or facility* for crushing or cleaning; or if they have been cleaned with an air-blast cleaner having a capacity of 2,500 cubic feet per minute.
9. Hay, straw, fodder, and plant litter of any kind.
10. Seed cotton and gin trash.
    Seed cotton is exempt if moving to a designated gin.*
11. Stumpwood.
12. Long green cucumbers, cantaloupes, peppers, squash, tomatoes, and watermelons, except those from which all soil has been removed.
13. Pickling cucumbers, string beans, and field peas.
    Pickling cucumbers, string beans, and field peas are exempt** if washed free of soil with running water.
14. Cabbage, except firm heads with loose outer leaves removed.
15. Leaf tobacco, except flue-cured leaf tobacco.
16. Ear corn, except shucked ear corn.
    Unshucked ear corn is exempt** if harvested without coming in contact with the soil.
17. Used crates, boxes, burlap bags, cotton picking sacks, and other used farm products containers.
18. Used farm tools.
    Used farm tools are exempt** if cleaned free of soil.
19. Used mechanized cultivating equipment and used harvesting equipment.
    Used mechanized cultivating equipment is exempt** if cleaned and repainted.
20. Used mechanized soil-moving equipment.
    Used mechanized soil-moving equipment is exempt** if cleaned and repainted.
21. Any other products, articles, or means of conveyance, of any character whatsoever, not covered by the above when it is determined by an inspector that they present a hazard of spread of witchweed and the person in possession thereof has been so notified.

*Information as to designated laboratories, facilities, gins, oil mills, and processing plants may be obtained from an inspector.

**Exempt if not exposed to infestation after cleaning or other prescribed handling.

THE FOLLOWING REGULATED ARTICLES REQUIRE A CERTIFICATE OR PERMIT YEAR-ROUND EXCEPT AS INDICATED:

1. Soil, compost, decomposed manure, humus, muck, and peat, separately or with other things; sand; and gravel.

   Soil samples shipped to approved laboratories do not require attachment of certificate or permit.*
2. Plants with roots.
3. Grass sod.
4. Plant crowns and roots for propagation.
5. True bulbs, corms, rhizomes, and tubers of ornamental plants.
6. Root crops, except those from which all soil has been removed.

   Root crops, such as turnips, carrots, and sweet potatoes, are exempt if moving to a designated processing plant.*
7. Peanuts in shells and peanut shells, except boiled or roasted peanuts.
8. Small grains and soybeans.

   Small grains are exempt** if harvested in bulk or into new or treated containers, and if the grains and containers for the grains have not come in contact with the soil, or if they have been cleaned at a designated facility.*

   Soybeans, other than for seed purposes, are exempt** if harvested in bulk or into new or treated containers, and if the beans and containers for the beans did not come in contact with the soil, and if such beans are moving forthwith to a designated oil mill or facility* for crushing or cleaning; or if they have been cleaned with an air-blast cleaner having a capacity of 2,500 cubic feet per minute.
9. Hay, straw, fodder, and plant litter of any kind.
10. Seed cotton and gin trash.

    Seed cotton is exempt if moving to a designated gin.*
11. Stumpwood.

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

STOCK MEALYBUG (*Pseudococcus comstocki*) - CALIFORNIA - Survey pleted in Earlimart and Delano, Kern County; one infestation ated one mile from Delano on Carces Highway. In Tulare County, survey in Exeter, Lindsday, and Dinuba negative for late finds. (Cal. Coop. Rpt.).

EUROPEAN CRANE FLY (*Tipula paludosa*) - WASHINGTON - Survey of 2 pastures in Custer area of Whatcom County revealed one to have second or third instar larvae at rate of 1,804 per square foot, and other pasture with larvae still in first instar and very light numbers. (Campbell).

GRASSHOPPERS - NEVADA - *Ageneotettix deorum* collected at Crestline, Lincoln County, August 23 by G.M. Nishida. Determined by R.C. Bechtel. This is a new county record. (Bechtel).

PINK BOLLWORM (*Pectinophora gossypiella*) - NEW MEXICO - Percent infestation in green bolls in cotton fields ranged 8-92 in Artesia area, Eddy County, and 0-52 in Roswell area, Chaves County. (Mathews). ARIZONA - Infested 70 percent of top crop at Bowie, Cochise County. (Ariz. Coop. Sur.).

WOOLLY WHITEFLY (*Aleurothrixus floccosus*) - CALIFORNIA - Survey revealed 17 new infestations in La Jolla, San Diego County. At each infestation 25 parasites released. This is farthest north pest found. Parasite releases continued in known infested area; 80 new releases made this period. Release sites total 1,059 on which 45,000 parasites released this season. (Cal. Coop. Rpt.).

DETECTION

New State Records - A CERAMBYCID BEETLE (*Leiopus variegatus*) - NEW JERSEY - Camden County. (p. 739). A DERMESTID BEETLE (*Anthrenus coloratus*) - OHIO - Hamilton County. NEW YORK - Herkimer County. NORTH CAROLINA - Wake County. (p. 740).

A REDUVIID BUG (*Gnathobleda litigiosa*) - OKLAHOMA - Three specimens collected at lights in McCurtain County by D.C. Arnold. Determined by W.A. Drew. Collected at Beavers Bend State Park June 16, 1970, and June 12, 1972, and at Battiest June 14, 1972. (Okla. Coop. Sur.). This species previously recorded in Florida, Georgia, Louisiana, Arkansas, and Texas. (PP).

New County and Parish Records - AN ALYDID BUG (*Esperanza texana*) LOUISIANA - Lincoln (p. 738). A GRASSHOPPER (*Ageneotettix deorum*) NEVADA - Lincoln (p. 741). WESTERN CORN ROOTWORM (*Diabrotica virgifera*) ILLINOIS - Schuyler, Piatt, Douglas, Moultrie, Vermilion, Greene, Macoupin (p. 737).

Weather of the week continued from page 736.

air over the East. Florida continued mild with afternoon temperatures in the 80's. Fort Myers and Palm Beach each registered 87 degrees Wednesday and 88 degrees Thursday. As the weekend drew near, one High cooled the Northeast and warmed the Great Plains. Temperatures over South Dakota reached the 70's Thursday afternoon, 76 degrees at Pickstown. A western High cooled Washington and Montana. Omak, Washington, recorded 25 degrees Thursday morning. Winter temperatures moved eastward over the weekend. The mercury at West Yellowstone, Montana, dropped to zero Sunday morning. Temperatures averaged above normal along the middle and southern Atlantic coast and below normal over most of the rest of the Nation. Parts of the southern Great Plains averaged 4 to 10 degrees cooler than normal.

LIGHT TRAP COLLECTIONS

FLORIDA - Gainesville, 10/20-26, BL - Beet armyworm (Spodoptera exigua) 6, fall armyworm (Spodoptera frugiperda) 3, granulate cutworm (Feltia subterranea) 2.

MISSISSIPPI - Stoneville, 10/20-26, 2BL, 36-74 degrees F, precipitation 1.90 - Armyworm (Pseudaletia unipuncta) 4, beet armyworm 1, granulate cutworm 5, tobacco budworm (Heliothis virescens) 2.

NEW HAMPSHIRE - Lee, 10/25, BL - Armyworm 1, black cutworm (Agrotis ipsilon) 1.

PENNSYLVANIA - (District) - Southeast, 10/12-22, BL - Variegated cutworm (Peridroma saucia) 1. Southwest, 10/12-22, BL - Armyworm 6, black cutworm 9.

TEXAS - Waco, 10/21-27, BL - Armyworm 75, beet armyworm 37, black cutworm 6, fall armyworm 49, granulate cutworm 61, variegated cutworm 101, yellowstriped armyworm (Spodoptera ornithogalli) 3.

MEDITERRANEAN FRUIT FLY
Ceratitis capitata (Wiedemann)

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